

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WASHINGTON 25, D. C.

Statement by T. Keith Glennan, Administrator
National Aeronautics and Space Administration

January 27, 1959

The process has begun to select the U. S. citizen who will become our 20th Century Mercury orbiting the Earth in space.

He will be a university graduate, with a degree in the physical sciences or in engineering. In addition, he will have graduated from one of the military test pilot training schools, and will have a minimum of 1500 hours of flight time in his log book. He will be younger than 40, and not taller than 5'11". In superb condition, he will possess the physical and psychological attributes suited for space flight, as determined by top aero-medical scientists who are participating in the National Aeronautics and Space Administration's Project Mercury.

Selection of the pilot-astronaut has already begun. He will be one of a dozen volunteers chosen with greatest care. The group will be totally involved in a program of rigorous training for the first orbital space flight, the climax of the Project Mercury program.

Although the first orbital flight by our modern Mercury will surely be a pioneering venture, we are determined that the risks to the pilot will be no greater than those experienced during the first flights of a new, high performance airplane. As in

such airplane flights, the Astronaut will play a vital role in the Mercury project. Repeated flights of the space capsule, first carrying only instruments, and later animals, will have tested and proven the practicability of the final phase of Project Mercury -- manned satellite flight -- before it is undertaken.

The first step in the selection process -- already completed -- was screening of the records of Air Force, Navy, and Marine officers who have been graduated from their service test-pilot schools. On the basis of criteria established with assistance of the NASA's Aeromedical Committee, headed by Dr. W. Randolph Lovelace, 110 potential candidates have been chosen.

Beginning early in February, the pilot-astronaut candidates will come to Washington in groups of about 30 to be given a full description of NASA's Project Mercury. NASA, Army, Navy, and Air Force bio-medical experts will participate in these meetings.

Only after these briefings will the candidates be asked if they will volunteer. From those who answer affirmatively, 36 will be chosen for the next step in the selection process. This smaller group will be given a series of intensive physical and psychological tests, which include studies of the candidates' ability to cope with the stresses of space flight and with the environmental and other bio-medical aspects of flight performed

under confined conditions over a long period.

By late March, it is expected selection of 12 volunteers for the Project Mercury team will have been made. This team will then begin the training program that will include both simulated and actual flight conditions that progressively come closer to those of orbital space flight.

The volunteers will be assigned to the NASA Space Task Group, located at Langley Research Center and under the project direction of Robert R. Gilruth. The Mercury Astronauts will be given additional training at the Johnsville Naval Air Development Center, Pennsylvania; the Atlantic Missile Range, Florida; the Air Force Wright Air Development Center, Ohio, and other biomedical centers in the U. S.

At Johnsville, the Astronauts will undergo training in a centrifuge that very nearly simulates conditions in a capsule during takeoff and re-entry. The early testing period will involve balloon flights in Mercury capsules to familiarize the Astronauts with some of the environmental conditions with which they will have to cope.

While the volunteer team is undergoing this training, technical teams will be testing Project Mercury capsule mockups in gradually increasing degrees of range and complexity.

Short range, solid fuel boosters will be used initially to launch these mockups in sub-orbital trajectories, followed by longer range flights, using more powerful boosters. At a later period in the program, animals will be launched in the capsule in order to determine more completely the environment man will experience in space flight.

All 12 volunteers of the Mercury team will be given the same preflight and flight training. Only immediately before the first manned orbital flight will the first Mercury Astronaut be selected.

On January 12, we announced the selection of McDonnell Aircraft Corporation as the source for the design, development, and construction of the Project Mercury capsule capable of carrying a man into orbital flight around the Earth. The space capsule, serving as the payload of a powerful booster, will be designed to carry a human passenger through the atmosphere, into orbital flights, and safely back to earth again. The satellite system will provide a means of studying the psychological and physiological effects of space flight on man. The research will include man's reaction to weightlessness during orbital flight, high acceleration during launch, and high deceleration during re-entry into the atmosphere.

Dr. Abe Silverstein, NASA Director of Space Flight

Development, is responsible for the over-all technical direction of Project Mercury. The Space Task Group, under Mr. Gilruth, while physically located at the NASA Langley Research Center, reports to Dr. Silverstein in NASA Headquarters, Washington, D. C.

Project Mercury, a program being conducted with the advice and assistance of the Advanced Research Projects Agency of the Department of Defense, is expected to continue for several years.

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